



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

SEP 17 2008

Mr. Tracy Parker
Mr. Jack G. Peterson
Draft Geothermal Leasing PEIS
c/o EMPSi
182 Howard Street, Suite 110
San Francisco, CA 94105-1611

Dear Mr. Peterson and Mr. Parker:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Programmatic Environmental Impact Statement (EIS) for Geothermal Leasing in the Western United States (CEQ #20080240) pursuant to the National Environmental Policy Act, and our authority under Section 309 of the Clean Air Act.

In accordance with the Energy Policy Act of 2005, the Bureau of Land Management (BLM) and the Forest Service (FS) are proposing to make decisions on geothermal lease applications submitted prior to January 1, 2005, in the current planning area of 192 million acres and to facilitate decisions on other existing and future lease applications and nominations covering a total area of 248 million acres. The Draft Programmatic EIS presents both broad impacts associated with the proposed action and alternatives, as well as more lease-specific analysis on 19 pending applications in seven geographical clusters of the planning area encompassing 36,937 acres. The alternatives evaluated included a no action alternative, potential leasing of 192 million acres (proposed alternative), and leasing within a 20-mile corridor from existing transmission lines.

The proposed project area covers 12 states with most of the potential leasing occurring in Nevada, western Utah, Idaho, California and southeast Oregon. The draft EIS states that "groundwater is the primary water resource that is potentially affected by geothermal exploration and development" (pg. 3.72). This is due to potential mixing of geothermal fluids from re-injection with surface or groundwater. With 23 sole-source aquifers located in the planning area, EPA has environmental concerns that the proposed action could potentially result in adverse impacts to groundwater quality, particularly sole-source aquifers. We recommend that the final EIS identify the types of mitigation measures that would be considered to protect these resources and how groundwater will

be monitored to detect infiltration of industrial fluids used in geothermal energy production.

The draft EIS states that there are areas designated as non-attainment or maintenance areas for Particulate Matter (PM₁₀) in the planning area. While we understand the general conformity rule will be followed in non-attainment areas, EPA has environmental concerns that without the necessary monitoring and mitigation measures air quality may be adversely impacted by the construction, and other emission sources. The final EIS should address what measures will be implemented to reduce impacts to air quality.

The draft EIS states that, "BLM regulations mandate that noise at one-half mile from geothermal operations, or at the lease boundary, if closer, shall not exceed 65 units of decibels A-weighted". However, it appears that all phases of geothermal exploration and development except reclamation and abandonment exceed this threshold. (pg. 4-154) Accordingly, EPA recommends that the final EIS discuss how the project will meet BLM noise regulations including a discussion of appropriate mitigation measures.

Consequently, in accordance with EPA's Policies and Procedures, we have rated the draft EIS as Environmental Concerns – Insufficient Information (EC-2). While EPA supports the development of geothermal energy as a renewable energy source, the proposed actions have the potential to have adverse impacts to air quality and groundwater.

EPA appreciates the opportunity to review this Draft Programmatic EIS. I am available to discuss our comments if you have questions. I can be reached at (202) 564-5400 or you can contact Jessica Trice of my staff at (202) 564-6646.

Sincerely,

A handwritten signature in dark ink, reading "Susan E. Bromm". The signature is fluid and cursive, with the first name "Susan" being the most prominent part.

Susan E. Bromm
Director
Office of Federal Activities